NOTES:

1. FOR GENERAL NOTES REFER TO 000-PR-PID-0001/0002/0003/0004.
2. ALL INSTRUMENT TAGS ARE PREFIXED WITH THE AREA NUMBER SHOWN ON THIS P&ID UNLESS OTHERWISE NOTED.
3. TUNDISH INSTALLED ABOVE WORKING LEVEL.
4. REAGENT ADDITION TO CELL 4 AND 5 VIA A VENDOR SUPPLIED TUNDISH.
5. FLOTATION CELL DART VALVES MAY BE OPERATED INDEPENDENTLY. CONTROL PROGRAMMING SHALL INCLUDE PROVISION FOR INDEPENDENT DART VALVE LEVEL CONTROL.
6. LAUNDER SPRAYS SHOWN ON 332-PR-PID-9023.

VENDOR PACKAGE
REFER TO VENDOR P&ID
1824-V0015-PR-PID-0002

PROCESS WATER
332-PR-PID-2002

FLOTATION AIR
332-PR-PID-2002

ROUGHER 2 CELL 5 AND 6 COLLECTOR PUMP 389-PP-9314
389-PR-PID-9302
271-M-011
20-RCL-PE3-143

ROUGHER 2 CELL 4 FROTHER PUMP 389-PP-9206
389-PR-PID-9201
270-M-011
10-RFR-PF2-044

ROUGHER 2 CELL 4 COLLECTOR PUMP 389-PP-9310
389-PR-PID-9301
271-M-011
20-RCL-PE3-135

ROUGHER 2 CELL 4 PROMOTER PUMP 389-PP-9110
389-PR-PID-9101
269-M-004
8-RCL-PF2-106

SP-335 3
SP-928
NOTE 3

127-M-001

FIT FV FIC AE 2704 PI LIT LIC LV M
332-FA-2004
NOTE 5

FIT FV FIC AE 2705 PI LIT LIC LV M
332-FA-2005
NOTE 5

NOTE 4

20-RCL-PE3-143
ROUGHER 2 CELL 6 332-FT-2006
332-PR-PID-2004

ROUGHER 2 CELL 3 332-FT-2003
332-PR-PID-2002

332-FT-2004
DN300 DN50
300-SPP-SC1-471
TO GRADE
40BA1-0328

DN80 DN80 DN80 332-FT-2005
DN150 DN150
DN300 DN50
300-SPP-SC1-472
TO GRADE
40BA1-0329

DN80 DN80 DN80

ROUGHER 2 CELL 5 AND 6 CONC. LAUNDER 332-LA-2006
332-PR-PID-2004

ROUGHER 1 AND 2 2nd CONC. BOX 4 332-BX-9004
332-PR-PID-9002

ROUGHER 1 AND 2 2nd CONC. BOX 3 332-BX-9003
332-PR-PID-9001

127-M-011
127-M-012
127-M-013

332-LA-2004
332-LA-2005

332-FA-2004	ROUGHER 2 CELL 4 GEARBOX FAN
332-FA-2005	ROUGHER 2 CELL 5 GEARBOX FAN
332-FT-2004	ROUGHER 2 CELL 4
332-FT-2005	ROUGHER 2 CELL 5
332-LA-2004	ROUGHER 2 CELL 3 AND 4 CONC. LAUNDER
332-LA-2005	ROUGHER 2 CELL 4 AND 5 CONC. LAUNDER

Minera Panamá

DRG No	REFERENCE DRAWINGS	REV	DATE	DESCRIPTION	DRN	CHK'D	DESIGN ENG.	LEAD ENG.	DESIGN APP'D	PROJ. APP'D	CLIENT APP'D
		3	16MAR18	REVISED AS SHOWN	DB	VA	MT	SB	BG	LG	
		2	04AUG17	HOLD 1200 AND VALVE NUMBERS ADDED	AD	GCP	DB	SB	PF	LG	
		1	24FEB17	REVISED AS NOTED (74 MTPA CASE)	CB	BT	DB	SB	BG	SM	
		0	08OCT15	ISSUED FOR CONSTRUCTION	WG	GCP	DB	SB	BG	SM	

DRAWN	CHECKED	DESIGN ENG.	LEAD ENG.	DESIGN APP'D	PROJ. APP'D	CLIENT APP'D

CLIENT MPSA
PROJECT MINA DE COBRE PANAMA

FIRST QUANTUM MINERALS LTD.

Lycopodium
Lycopodium Minerals Pty Ltd ABN: 34 055 880 209
Level 5, 1 Adelaide Terrace, East Perth, Western Australia 6004
T: +61(0) 8 6210 5222 www.lycopodium.com.au

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DRAWING TITLE
COPPER ROUGHER FLOTATION
ROUGHER 2 - SHEET 3
PIPING & INSTRUMENTATION DIAGRAM

SCALE	JOB No.	DRG No.	REV.
NTS	1824	332-PR-PID-2003	3

DRAWN JSV
DATE 18NOV13